CHAPTER 8

STANDARDIZED FIELD SOBRIETY TESTS (SFSTs)

8.1 GENERALLY

Field sobriety tests (FSTs) are tools to aid officers in determining whether a person is impaired by the consumption of alcohol or drugs. These tests are designed to evaluate an individual's divided attention. Divided attention is the ability of a person to do more than one thing at a time (usually slightly more complicated than walking and chewing gum). For example, while driving a person must pay attention to the speed limit, be aware of traffic, watch for traffic signals and be prepared to react to any unusual road conditions. An impaired driver's ability to divide his/her attention is diminished by intoxication, which results in driving errors. Field sobriety tests assess divided attention by requiring the person to complete both physical and mental tasks simultaneously, thereby testing a person's ability to divide attention between two or more tasks.

There are several field sobriety tests available for an officer to use. Some examples of field sobriety tests include the Rhomberg modified test, the walk-and-turn test, the horizontal gaze nystagmus (HGN) test, the one-leg stand test, the finger-to-nose and the finger count test. Each field sobriety test has specific cues that an officer looks for while monitoring a suspect's performance. Officers also evaluate test performance in the context of the existing roadside conditions.

8.2 HISTORY

In 1977, the United States Department of Transportation, through the National Highway Traffic Safety Administration (NHTSA), contracted with the Southern California Research Institute (SCRI) to determine whether systematic and standardized field sobriety testing procedures would yield identifiable clues to allow officers to accurately detect impairment at or above a 0.10 alcohol concentration. As a result of this research, SCRI discovered that a battery of three standardized field sobriety tests (SFSTs) were accurate predictors: the walk-and-turn test, the one-leg stand test, and the horizontal gaze nystagmus test (HGN). These field sobriety tests are considered standardized, because the tests are administered using the same instructions regardless of who is administering the tests.

Subsequent studies have reevaluated the reliability of these tests at or above a 0.08 alcohol concentration since most jurisdictions have lowered their *per se* limit to a 0.08 standard. Pursuant to these studies, two or more errors on either the one-leg stand or the walk-and-turn indicate that an officer will correctly predict an alcohol concentration at or above a 0.08 with a high degree of accuracy. Four or more cues on the HGN test are consistent with having an alcohol concentration at or above a 0.08.

8.3 VALIDATION STUDIES

Until 1977, officers used field sobriety tests that were selected or designed by their local departments. The tests lacked scientific research as to their effectiveness at exposing impairment. The tests were administered randomly, as each officer saw fit. In 1977, however, Dr. Marcelline Burns of the Southern California Research Institute (SCRI) conducted research on field sobriety testing which resulted in a systematic and standardized testing procedure that repeatedly demonstrated accuracy when identifying impairment.

As discussed above, the 1977 SCRI study, which examined a variety of tests to determine which were the most effective at detecting impairment, concluded that the most effective tests were the walk-and-turn, the one-leg stand and the HGN tests. The next phase of research was conducted in 1981 and focused on the standardization of these three SFSTs. After

standardization, law enforcement officers uniformly administered the tests yielding an 81% accuracy rate at determining whether an individual was above or below a 0.10 alcohol concentration.

NHTSA funded a third study in 1983. That study determined officers were 77% accurate in establishing a suspect's alcohol concentration to be at or above a 0.10 when basing the decision solely on the results of the HGN test. Officers were 68% accurate in their determination when utilizing the walk-and-turn test and 65% accurate when relying on observations made during the one-leg stand test. However, when HGN and the one-leg stand were combined, officers were 80% accurate in estimating an alcohol concentration to be at or above 0.10.

More recent studies reveal officers have become even more accurate with training and experience. In 1995, a Colorado Validation Study revealed that experienced officers using the three test battery were 93% accurate predicting an alcohol concentration at or above 0.05. Similarly, a 1997 Florida Validation Study found officers who used the three test battery to be 95% accurate in their predictions of 0.08 alcohol concentration. In 1998, a California Validation Study determined officers to be 87% accurate when using only the HGN test and 91% accurate when using the three test battery to detect an alcohol concentration at or above 0.08.

8.4 CONSTITUTIONAL CONSIDERATIONS

The Fifth Amendment's right against compelled self-incrimination does not apply to field sobriety tests. Field sobriety tests do not involve testimonial or communicative evidence, meaning that they do not reveal an individual's subjective knowledge or thought process. *State v. Theriault*, 144 Ariz. 166, 167, 696 P.2d 718, 719 (App. 1984). Therefore, a defendant does not need to be advised of his *Miranda* rights before being asked to do FSTs. *Id.* Field sobriety tests are non-testimonial, regardless of whether someone is arrested; therefore, even if a defendant has been placed under arrest, the officer does not need to advise the defendant of his *Miranda* rights prior to asking him to complete

In *Pennsylvania v. Muniz*, 496 U.S. 582 (1990), the United States Supreme Court held that physical observations made during the performance of FSTs, including speech characteristics and muscular coordination, are not

testimonial in nature and do not require *Miranda* warnings. Requiring suspects to reveal the physical manner in which they articulate words does not require them to disclose information within the meaning of the Fifth Amendment. To be testimonial, the communication must, "'explicitly or implicitly, relate a factual assertion or disclose information.'" *Id.* at 594 (citing *Doe v. United States*, 487 U.S. 201, 210 (1988).

Thus, any incriminating statements made by a suspect during FSTs are deemed voluntary since they are not in response to custodial interrogation. *Muniz*, 496 U.S. at 604. *See also Berkemer v. McCarty*, 468 U.S. 420 (1984) (roadside questioning of motorist detained pursuant to routine traffic stop did not constitute "custodial interrogation" for purposes of *Miranda* rule).

The Utah Constitution's protection against self-incrimination is found in Article I § 12. That provision states in part, "The accused shall not be compelled to give evidence against himself . . . ." This language, while slightly different from the Fifth Amendment, has been interpreted by the Utah Supreme Court to offer neither more nor less protection for individuals than the Federal Constitutional provisions.

8.5 STANDARDIZED FIELD SOBRIETY TESTS

8.5.1 HORIZONTAL AND VERTICAL GAZE NYSTAGMUS

"Nystagmus" means an involuntary jerking of the eyes. Since this jerking cannot be consciously controlled, it is impossible for a suspect to practice the test in order to defeat the DUI investigation.

HORIZONTAL GAZE NYSTAGMUS

Horizontal Gaze Nystagmus (HGN) refers to an involuntary jerking occurring as the eyes gaze toward the side. In addition to being involuntary the person experiencing the nystagmus is unaware that the jerking is happening.

Involuntary jerking of the eyes becomes readily noticeable when a person is impaired. As a person's blood alcohol concentration increases, the eyes will begin to jerk sooner as they move to the side.

Horizontal Gaze Nystagmus is the most reliable field sobriety test. Especially when used in combination with the divided attention tests, it will help police officers correctly identify suspects who are impaired.

In administering the HGN test, the officer has the suspect follow the motion of a small stimulus with the eyes only. The stimulus may be the tip of a pen or penlight, an eraser on a pencil or your finger tip, whichever contrasts with the background.

When the HGN test is administered always begin with subject's left eye. Each eye is examined for three specific clues.

o as the eye moves from side to side, does it move smoothly or does it jerk noticeably? (As people become impaired by alcohol, their eyes exhibit a lack of smooth pursuit as they move from side to side.)

o when the eye moves as far to the side as possible and is kept at that position for several seconds, does it jerk distinctly? (Distinct and sustained nystagmus at maximum deviation is another clue of impairment.)

o as the eye moves toward the side, does it start to jerk prior to a 45-degree angle? (Onset of nystagmus prior to 45-degrees is another clue of impairment.)

As a person's blood alcohol concentration increases it is more likely these clues will appear. The maximum number of clues that may appear in one eye is three. The maximum total number for any suspect is six. The original research shows that if four or more clues are evident, it is likely that the suspect's blood alcohol concentration is above 0.10. With four-or-more clues present, this test is 77% accurate.

VERTICAL GAZE NYSTAGMUS

Vertical Gaze Nystagmus is an involuntary jerking of the eyes (up and down) which occurs when the eyes gaze upward at maximum elevation. Although this type of nystagmus was not addressed in the original

research, field experience has indicated that the presence of Vertical Gaze Nystagmus has proven to be a reliable indicator of high doses of alcohol for that individual or certain other drugs.

8.5.2 DIVIDED ATTENTION TESTS

Many of the most reliable and useful psychophysical tests employ the concept of divided attention: they require the subject to concentrate on two things at once.

Driving is a complex divided attention task. In order to operate a vehicle safely, drivers must simultaneously control steering, acceleration and braking; react appropriately to a constantly changing environment; and perform many other tasks. Alcohol and many other drugs reduce a person's ability to divide attention. Impaired drivers often ignore the less critical tasks of driving in order to focus their impaired attention on the more critical tasks. For example, a driver may ignore a traffic signal and focus instead on speed control.

Even when they are impaired, many people can handle a single, focused attention task fairly well. For example, a driver may be able to keep the vehicle well within the proper traffic lane, as long as the road remains fairly straight. However, most people when impaired cannot satisfactorily divide their attention to handle multiple tasks at once.

The concept of divided attention has been applied to psychophysical testing. Field sobriety tests that simulate the divided attention characteristics of driving have been developed and are being used by police departments nationwide. The best of these tests exercise the same mental and physical capabilities that a person needs to drive safely:

o information processing;
o short-term memory;
o judgment and decision making;
o balance;
o steady, sure reactions;
o clear vision;
o small muscle control;
o coordination of limbs.

Any test that requires a person to demonstrate two or more of these capabilities simultaneously is potentially a good psychophysical test. Simplicity is the key to divided attention field sobriety testing. It is not enough to select a test that just divides the subject's attention. The test also must be one that is reasonably simple for the average person to perform when sober. Tests that are difficult for a sober subject to perform have little or no evidentiary value.

Two divided attention field sobriety tests that have proven accurate and effective in DUI detection are the Walk-and-Turn and the One-Leg Stand. These tests are described briefly below.

8.5.2.1 WALK AND TURN

Walk-and-Turn is a test that has been validated through extensive research sponsored by the National Highway Traffic Safety Administration (NHTSA). It is a divided attention test consisting of two stages:

o Instructions Stage; and,
o Walking Stage.

In the Instructions Stage, the subject must stand with their feet in heel-to-toe position, keep their arms at their sides, and listen to the instructions. The Instructions Stage divides the subject's attention between a balancing task (standing while maintaining the heel-to-toe position) and an information processing task (listening to and remembering instructions).

In the Walking Stage the subject takes nine heel-to-toe steps, turn in a prescribed manner, and take nine heel-to-toe steps back, while counting the steps out loud, while watching their feet. During the turn, the subject keeps their front foot on the line, turn in a prescribed manner, and use the other foot to take several small steps to complete the turn. The Walking Stage divides the subject's attention among a balancing task (walking heel-to-toe and turning); a small muscle control task (counting out loud); and a short-term memory task (recalling the number of steps and the turning instructions).

The Walk-and-Turn test is administered and interpreted in a standardized manner, i.e., the same way every time. Officers administering the Walk-and-Turn test observe the suspect's performance for eight clues:

o can't balance during instructions;
o starts too soon;
o stops while walking;
o doesn't touch heel-to-toe;
o steps off line;
o uses arms to balance;
o loses balance on turn or turns incorrectly; and,
o takes the wrong number of steps.

Inability to complete the Walk-and-Turn test occurs when the suspect:

o steps off the line three or more times;
o is in danger of falling;
o cannot do the test.

Original research shows that if a suspect exhibits two or more of the clues, or cannot complete the test, the suspect's BAC is likely to be above 0.10. This criterion has been shown to be accurate 68 percent of the time.

8.5.2.2 ONE-LEG STAND

The One-Leg Stand test also has been validated through NHTSA's research program. It is a divided attention test consisting of two stages:

o Instructions Stage; and,
o Balance and Counting Stage.

In the Instruction Stage, the subject must stand with feet together, keep arms at sides, and listen to instructions. This divides the subject's attention between a balancing task (maintaining a stance) and an information processing task (listening to and remembering instructions.)

In the Balance and Counting Stage, the subject must raise one leg, either leg, with the foot approximately six inches off the ground, keeping raised

foot parallel to the ground. While looking at the elevated foot, count out loud in the following manner:

"one thousand and one", "one thousand and two", “one thousand and three” until told to stop. This divides the subject's attention between balancing (standing on one foot) and small muscle control (counting out loud).

The timing for a thirty-second period by the officer is an important part of the One-Leg Stand test. The original research has shown that many impaired subjects are able to stand on one leg for up to 25 seconds, but that few can do so for 30 seconds.

One-Leg Stand is also administered and interpreted in a standardized manner. Officers carefully observe the suspect's performance and look for four specific clues:

o sways while balancing;
o uses arms to balance;
o hops;
o puts foot down.

Inability to complete the One-Leg Stand test occurs when the suspect:

o puts the foot down three or more times, during the 30-second period;
o cannot do the test.

The original research shows that, when the suspect produces two or more clues or is unable to complete the test, it is likely that the BAC is above 0.10. This criterion has been shown to be accurate 65 percent of the time.

8.6 COMMENTS ON REFUSAL TO PERFORM SFSTs

There currently exists no direct case law in Utah relating to a suspect’s refusal to submit to SFSTs. However, it can certainly be argued that §**41-6a-524** applies. This section states, in relevant part:

41-6a-524. Refusal as Evidence.

If a person under arrest refuses to submit to a chemical test or tests ***or any additional test*** [emphasis added] under Section **41-6a-520**, evidence of any refusal is admissible in any civil or criminal action or proceeding arising out of acts alleged to have been committed while the person was operating or in actual physical control of a motor vehicle while:

(1) under the influence of:

(a) alcohol;
(b) any drug; or
(c) a combination of alcohol and any drug;

(2) having any measurable controlled substance or metabolite of a controlled substance in the person's body;

(3) having any measurable or detectable amount of alcohol in the person's body if the person is an alcohol restricted driver as defined under Section **41-6a-529**; or

(4) having any measurable or detectable amount of alcohol in the person's body if the person has been issued a conditional license under Section **53-3-232**.

Prosecutors should be aware of this and in appropriate cases, obtain court approval to comment on an SFST refusal through a Motion *in Limine* prior to the beginning of trial.

updated 03.22.2007